UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

51092

7590

03/11/2009

ESCHWEILER & ASSOCIATES LLC 629 EUCLID AVENUE, SUITE 1000 NATIONAL CITY BUILDING CLEVELAND, OH 44114

EXAMINER					
YUN, EUGENE					
ART UNIT	PAPER NUMBER				
2618 DATE MAILED: 03/11/200	9				

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772.650	02/04/2004	Ying-Chien Lin	INFAP139US	5816

TITLE OF INVENTION: METHOD FOR BALANCING THE LOAD OF A WIRELESS LOCAL AREA NETWORK

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	06/11/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

appropriate. All further indicated unless correct maintenance fee notifica	correspondence includir ed below or directed oth	ng the Patent, advance on herwise in Block 1, by (orders and notification of r a) specifying a new corres	naintenance fees v pondence address	will be ; and/or	mailed to the current (b) indicating a sepa	correspondence address as rate "FEE ADDRESS" for	
	ENCE ADDRESS (Note: Use BI	ock 1 for any change of address)	Feet	s) Transmittal, Th	is certif	icate cannot be used for	r domestic mailings of the or any other accompanying nt or formal drawing, must	
51092	7590 03/11	/2009	nave			_		
629 EUCLID A' NATIONAL CI			I he Stat addı tran	reby certify that thes Postal Service v	nis Fee(e of Mailing or Transı s) Transmittal is being ficient postage for firs ISSUE FEE address 1) 273-2885, on the da	mission get deposited with the United tt class mail in an envelope above, or being facsimile ate indicated below.	
CLEVELAND,	OH 44114						(Depositor's name)	
							(Signature)	
							(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.	
10/772,650	02/04/2004	•	Ying-Chien Lin			INFAP139US	5816	
TITLE OF INVENTION	N: METHOD FOR BALA	ANCING THE LOAD OF	F A WIRELESS LOCAL A	REA NETWORK				
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	YES	\$755	\$300	\$0		\$1055	06/11/2009	
EXAM	MINER	ART UNIT	CLASS-SUBCLASS					
YUN, E	UGENE	2618	370-238000					
1. Change of correspond CFR 1.363).		,	2. For printing on the p (1) the names of up to	3 registered pater		neys 1		
	oondence address (or Cha B/122) attached.		(2) the name of a singl	or agents OR, alternatively, (2) the name of a single firm (having as a member a 2				
"Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. [2] In latin of a single limit (lating as a method a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.								
3. ASSIGNEE NAME A	ND RESIDENCE DATA	A TO BE PRINTED ON	THE PATENT (print or type	pe)				
PLEASE NOTE: Un recordation as set fort	less an assignee is ident th in 37 CFR 3.11. Comp	ified below, no assignee pletion of this form is NC	data will appear on the p T a substitute for filing an	atent. If an assign	nee is id	dentified below, the do	ocument has been filed for	
(A) NAME OF ASSI	GNEE		(B) RESIDENCE: (CITY	and STATE OR O	COUNT	RY)		
Please check the appropr	riate assignee category or	categories (will not be p	rinted on the patent): \Box	Individual 🖵 C	orporati	on or other private gro	oup entity 🗖 Government	
4a. The following fee(s)	are submitted:	4	b. Payment of Fee(s): (Plea	se first reapply a	ny prev	iously paid issue fee s	shown above)	
Issue Fee			A check is enclosed.					
*	No small entity discount p		Payment by credit car The Director is hereby	d. Form PTO-2038 authorized to char	3 is atta rge the	iched. required fee(s), any de	ficiency, or credit any	
			The Director is hereby overpayment, to Depo	sit Account Numb	er	(enclose a	n extra copy of this form).	
5. Change in Entity Sta	i tus (from status indicated ns SMALL ENTITY statu	,	☐ b. Applicant is no lon	ger claiming SMA	II EN'	FITV status See 37 CI	ER 1.27(α)(2)	
NOTE: The Issue Fee an	nd Publication Fee (if req	uired) will not be accepte	ed from anyone other than t				e assignee or other party in	
interest as shown by the	records of the United Sta	ites Patent and Trademarl	k Office.					
Authorized Signature				Date				
Typed or printed name				Registration N	No			
This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 d application form to the ions for reducing this bu. Jirginia 22313-1450. DC	CFR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the O NOT SEND FEES OR	on is required to obtain or r 1.14. This collection is est y depending upon the indiv he Chief Information Office COMPLETED FORMS TO	etain a benefit by t imated to take 12 idual case. Any coor, U.S. Patent and D THIS ADDRESS	the pub minutes omment Traden S. SEN	lic which is to file (and s to complete, includin s on the amount of tir nark Office, U.S. Depa D TO: Commissioner f	by the USPTO to process) g gathering, preparing, and ne you require to complete urtment of Commerce, P.O. for Patents, P.O. Box 1450,	

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/772,650	02/04/2004	Ying-Chien Lin	INFAP139US 5816	
51092 75	90 03/11/2009		EXAM	IINER
ESCHWEILER &	& ASSOCIATES LL	YUN, E	UGENE	
	NUE, SUITE 1000	ART UNIT	PAPER NUMBER	
NATIONAL CITY CLEVELAND, OF			2618 DATE MAILED: 03/11/200	9

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 728 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 728 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)	
	10/772,650	LIN ET AL.	
Notice of Allowability	Examiner	Art Unit	
	EUGENE YUN	2618	
The MAILING DATE of this communication appear All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT Report of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commits application is and MPEP 1308.	n this application. If not included unication will be mailed in due cou	ırse. THIS
	<u> </u>		
2. 🛮 The allowed claim(s) is/are <u>1-9</u> .			
 3. Acknowledgment is made of a claim for foreign priority ur a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority do International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be subm 	e been received. e been received in Application cuments have been receive of this communication to file IENT of this application.	on No ed in this national stage application e a reply complying with the require	ements
INFORMAL PATENT APPLICATION (PTO-152) which give 5. CORRECTED DRAWINGS (as "replacement sheets") mus	es reason(s) why the oath o		ICE OF
(a) I including changes required by the Notice of Draftspers	on's Patent Drawing Revie	w (PTO-948) attached	
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date	•		
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t	.84(c)) should be written on	the drawings in the front (not the bac	ck) of
 DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT 			the the
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview S Paper No 7. ☐ Examiner's —	nformal Patent Application Summary (PTO-413), //Mail Date s Amendment/Comment s Statement of Reasons for Allowal	nce

Application/Control Number: 10/772,650 Page 2

Art Unit: 2618

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-9 are allowed.

Regarding Claim 1, Olkkonen and He do not teach, alone nor in combination, the combination of:

sending a probe-request frame for association with said service set from a station to said plurality of access points;

selecting an access point with the lowest load;

sending a probe-response frame from the access point with the lowest load to the station; and

constructing an association between the station and the access point with the lowest load for balancing the load of said plurality of access points.

Regarding Claim 9, Olkkonen and He do not teach, alone nor in combination, the combination of:

at least one station configured to send to said plurality of access points a proberequest frame for association with said service set,

wherein the system is configured to select an access point with the lowest load and to send a probe-response from the access point with the lowest load to said station and wherein the system is further configured to construct an association 5ctwcen the station and the access point with the lowest load.

Conclusion

Application/Control Number: 10/772,650 Page 3

Art Unit: 2618

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EUGENE YUN whose telephone number is (571)272-7860. The examiner can normally be reached on 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on (571)272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Eugene Yun Examiner Art Unit 2618

/Eugene Yun/ Examiner, Art Unit 2618 /E. Y./ Examiner, Art Unit 2618

/Duc Nguyen/ Supervisory Patent Examiner, Art Unit 2618